

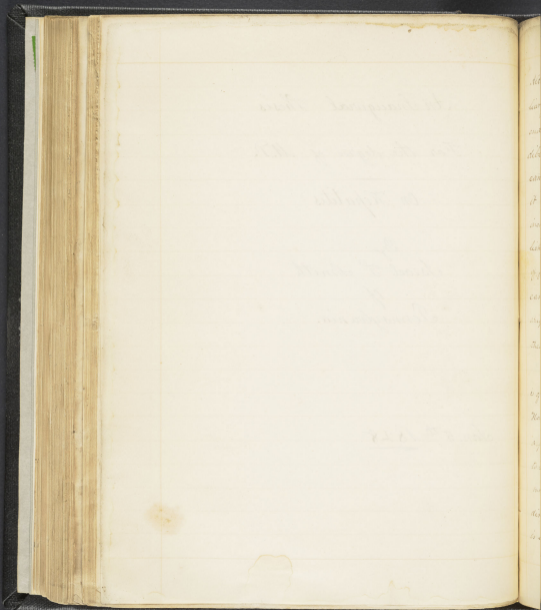
An Inaugural Thesis  
For the degree of M.D.  

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On Hepatitis

By  
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of  
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Although medicine is a subject on which speculation is peculiarly barren and unprofitable, or even dangerous, yet every endeavour to explore its secret recesses is surely commendable. While it is admitted that important results can come only from the investigations of mature experience, it will not be denied that deductions, not entirely incorrect may be drawn from facts discovered and established by others. It is evident to every one that a compilation of facts is the only purpose on which an inexperienced person can be in any degree successful. With him all attempt at originality of remark must necessarily degenerate into trifling theories.

That a knowledge of the morbid affections of the liver is of the first importance it would be superfluous to assert. Holding as it does the highest rank in the animal economy, a proper performance of its functions is absolutely essential to health; and some of the most terrific maladies to which we are subject can be traced to that organ in a state of disease. The hepatic apparatus like other parts of the body is liable to inflammation, which is divided into acute

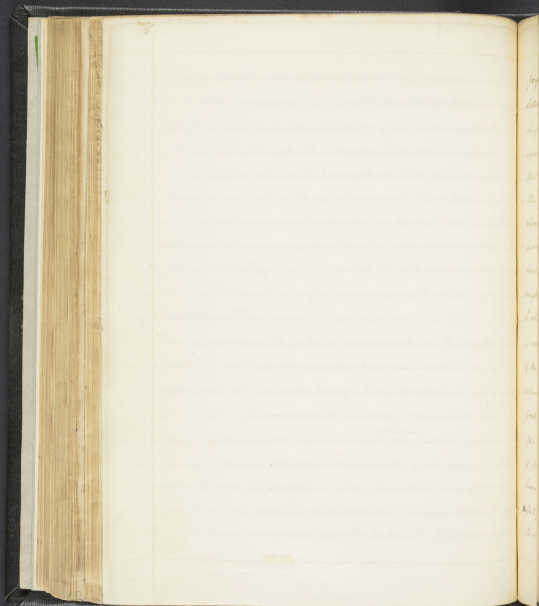


and chronic. An intermediate state has been observed, which is denominated subacute. There is also some distinction made in the disease, as it may affect the various figures of the gland. When the inflammation occupies the peritoneal coat, the pain is sharp & lancinating and the pulse small, hard, and corded, the tongue white &c. When the pain is dull and obtuse the pulse slower & fuller inflammation of its substance is denoted. When the lungs are affected severely, it is supposed that the convex surface is affected, and the concave, when there is much distop & stomach.

#### The inflammation

is caused by violent exertions of strength and activity, and it is not uncommon for persons after exposure to complain almost immediately, of pungent pain in the side, which shall eventually prove to be a severe hepatitis.

Violent <sup>Exertion</sup> bodily, will more severely produce this inflammatory disease, if performed under the influence of a burning sun, or of ardent spirits. Many of the numerous cases of hepatitis among the labouring classes of our people can easily be traced to their extreme aversion to the

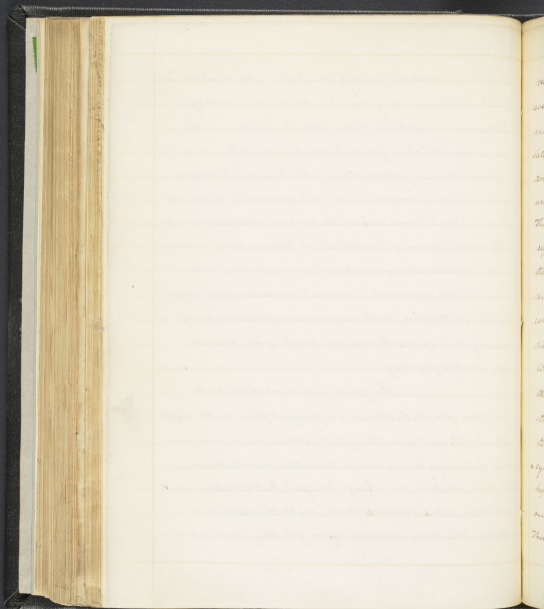


performance of any kind of action, except under its stimulating influence. The exposure to elevations of heat and cold, in quick transition is a prolific source of hepatic disease, especially when combined with moisture. It has been remarked that as the lungs are affected by cold, in the same ratio is the liver affected by heat. That the inhabitants of tropical climates are so extremely liable to disease of the liver, cannot however be solely attributed to the heat. There are many concurrent causes, which operate very much in its production, and ought in many cases indeed to be styled its exciting cause. I allude here particularly to the case of foreigners from a colder climate, who do not adapt themselves to the customs of the country, but carry with them their modes of living, to which they had at home been accustomed. The stimulating food and drink which was there harmless or even necessary for the support of his system, is here wholly, then a species of poison. Foreigners in the East and West Indies, living luxuriously, and being engaged during the heats of the day in fatigues of an active employment, feel irresistibly disposed to cry of the refreshing sea breezes as evening arrives. But the



position is one of extreme fatality. The profuse perspiration into which the individual may have been thrown is suddenly checked, and congestions of the internal organs is the consequence. The abuse of ardent spirits is one of the most common causes of inflammation of the liver, and we rarely see an habitual drunkard who is not affected with it in its chronic form. Harsh, misanthropic are also a common cause of the chronic form of hepatitis. To its children are peculiarly liable. Mechanical injuries & certain emotions of the mind are also enumerated among the sources from which hepatitis is derived. To the encephalic and injudicious use of mercury, it is asserted that we owe much of its present comparative frequency.

The first and most characteristic symptom often to be observed is a pungent pain in the right hypochondriac region though it is more commonly preceded by languor, nausea, aversion to motion and shivering. The pain, which is not always pungent, but sometimes dull and obtuse extends upwards to the right shoulder and clavicle. There is dry cough, oppression of breathing, and a most

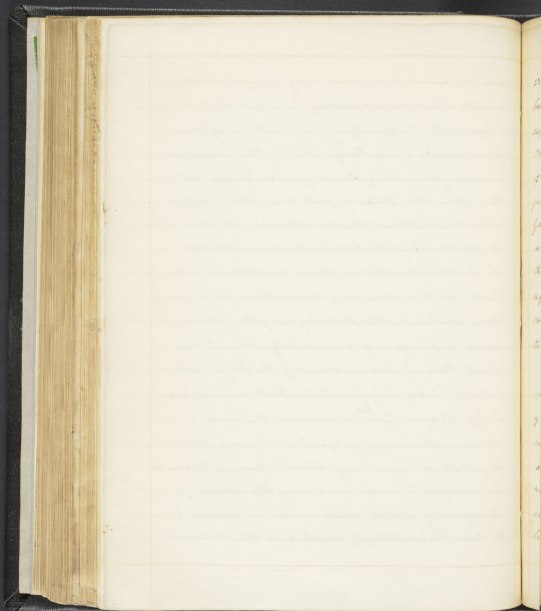


excellent thirst. The skin is hot and dry, the urine high coloured and small in quantity. In severe congestions and inflammations of the substance of the liver, it is stimulated above the secreting point, the alvine evacuations sustaining a great interruption of the biliary secretion, and being of a whitish, clay or ash-coloured appearance. The bowels are remarkably torpid and inactive, and require a constant use of cathartic medicines to keep them in a soluble state. With these symptoms there is more especially in the early stages of the disease a considerable degree of nausea and vomiting. As the disease advances in its career, the fat is absorbed, the tongue becomes covered with a white, or coated as the case may be with a dark, heavy fur, and the skin and conjunctiva of the eye change to a deep yellow hue. This appearance of the skin & eye is one which has long been observed as attending hepatic derangements, and was supposed to be dependent on an absorption of the obstructed bile into the system. This is now denied by those who contend that it is



mere coincidence, and in no way owing to such a cause. The liver becomes swollen and exquisitely painful on pressure, the patient lying only on the right side with any degree of ease, though even in this situation he is far from being devoid of pain. During all this time the pulse is full and strong, except when the inflammation is exclusively located in the capsular coat when it shows and corded.

In the chronic species the pain resembles the acute but is commonly more obtuse. It is nearly always seated in the parenchyma of the gland, which is possessed of a sensibility much less acute than its serous covering. In confirmation of this it need only be stated that on dissection large abscesses have <sup>been</sup> discovered in the livers of persons who during life had scarcely the slightest intimation of hepatic disease. It would be improper to avoid mentioning the extreme depression of spirits which occurs in disease of the liver, this is strongly marked in the morae,



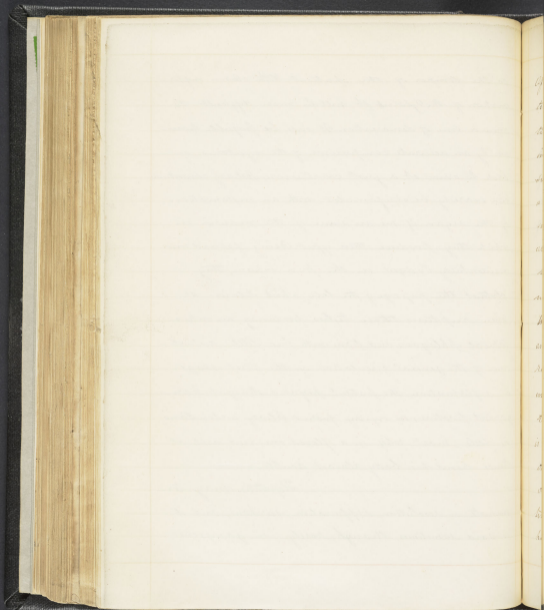
irritable expression of countenance. The patient in fact becomes the confirmed hypochondriac sunk into the deepest apathy, or tormenting himself with imaginary evils. Chronic Hepatitis is also attended with many of the symptoms of constipation and dyspepsia as loss of appetite, headache, flatulency, acidity, flatulency, and pains in the stomach or gastrodynia. After these symptoms have continued for some time, a gradual hardening and enlargement of the liver takes place. This is evident by a considerable degree of fulness and hardness in the right hypochondriac region, the tumour being sometimes manifest to the most inexperienced touch.

Hepatitis is exceedingly prone to imitate various other diseases, from most of which it can be easily distinguished. From pneumonia it may be distinguished by the cough and dyspnoea in the former being more violent, and by its being attended with a more copious excretion of mucus; a true disease of the lungs too producing an entirely different effect



on the temper of the patient. With obvious inflammation of the spleen it will be more difficult to draw a line of demarcation. It will be possible however by an accurate comparison of the symptoms of each to arrive at a just conclusion. Biliary concretions can scarcely be confounded with an inflammation of the organ if we are aware of the manner in which they produce their effect. Being formed and accidentally lodged in the peri-biliary, they obstruct the passage of the bile, which irritates or even ruptures those tubes, producing an intense topical phlogosis and pain with but little disturbance of the general circulation in the first stage. In inflammation the patient prefers a straight, horizontal posture, in agony from a biliary calculus he feels most relief in a flexed one, and will at times bend his body almost double.

Hepatitis may terminate in resolution, suppuration, scirrhus, and it is said sometimes, though rarely in gangrene.

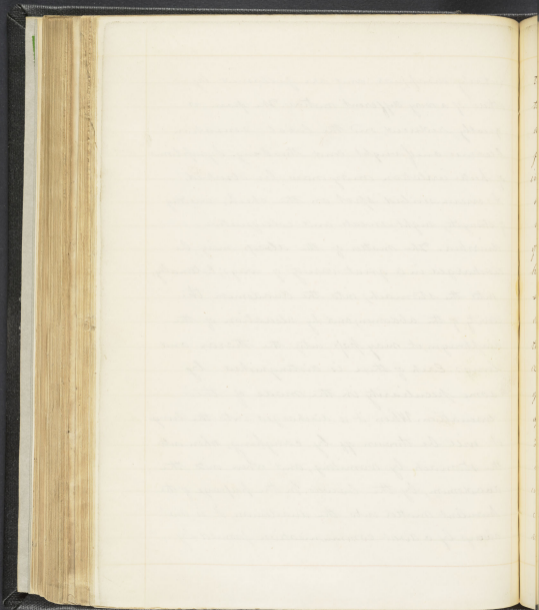


If then, the only healthy termination is resolution, or a gradual subsidence of all the inflammatory symptoms. It is surely that the inflammation terminates in resolution without some critical evacuation being extant, as in a copious perspiration, an increased flow of urine depositing a calcareous sediment, a hemorrhage, or diarrhoea. This is the only healthy termination of hepatitis, and it is the end to which all our remedies must be addressed.

When the febrile symptoms increase in violence, or continue with unabated severity we have reason to fear that our endeavours will be unavailing, and that the disease will ultimately terminate in suppuration. Of such importance is this that as long as the intense heat and dryness of the skin remains, as well as the violence of the pain, so long must we continue our depletory measures. After an abscess has completely formed these symptoms



entirely disappear, and are followed by others of a very different nature. The pain is greatly reduced, and the local sensation becomes enfeebled and throbbing. Symptoms of hectic irritation may now be observed. A circumscribed spot on the cheek, wasting of strength, night sweats and colligative diarrhoea. The matter of the abscess may be discharged in a great variety of ways; Externally, into the stomach, into the duodenum, the cavity of the abdomen; and by ulceration of the diaphragm, it may pass into the thorax and lungs. Each of these is distinguished by some peculiarity in the mode of their evacuation. When it is discharged into the lungs it will be thrown off by coughing, when into the stomach by vomiting, and when into the duodenum, by the bowels. In the passage of the purulent matter into the duodenum, it is not always by a direct communication formed by

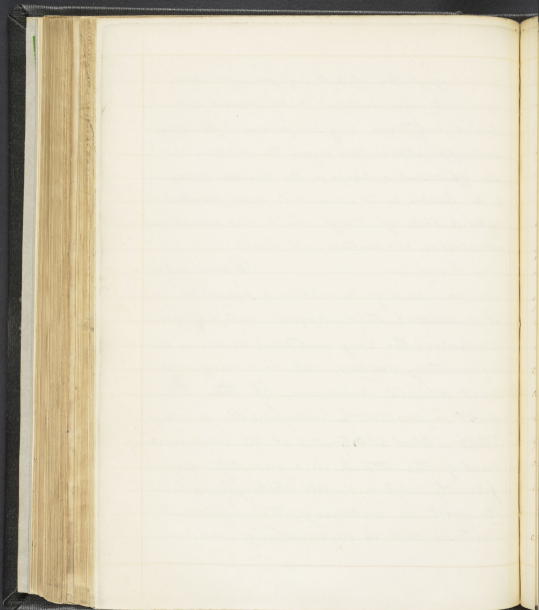


the ulcerative process, but occasionally through  
the biliary ducts. All these modes of  
discharge are to be considered as consequentially  
fatal except those externally and through the  
intestines. As the abscess makes its way  
externally, it forms a soft, fluctuating tumour  
which is easily known; An adherence of the arch  
of the colon to the lower margin of the liver  
has however been mistaken for it. By its  
softness, and fluctuation an abscess can be  
distinguished by the touch from scirrhus of  
the organ, another very common structural  
arrangement. Abscesses may form in other parts  
of the system simultaneously with the  
appearance of the suppuration in the liver.  
These, whether existing in the lungs or kidneys,  
and discharged through the medium of the  
ureters, as bronchial ramifications are not to be  
considered, as they sometimes are, as abscess marking,  
as coming from the liver. The extensive and

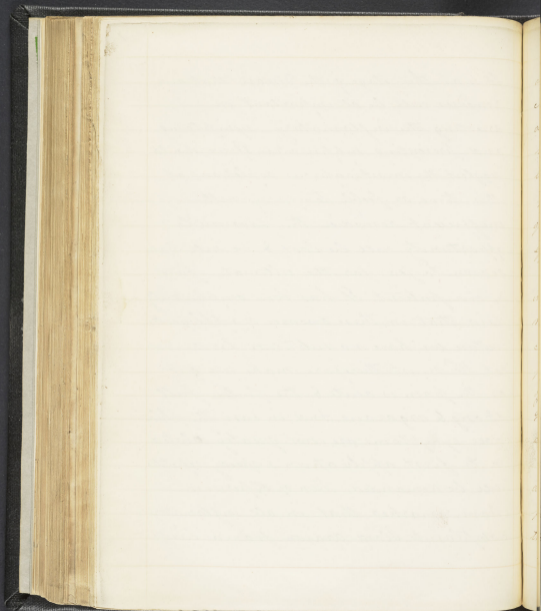


powerful sympathies which it possesses with other organs, or the same irritation in the stomach, from which it may, <sup>have</sup> arisen, may also produce inflammation and suppuration in those organs. The irritation can also effect such a change in the mucous lining of the bronchia, as to cause it to secrete purulent matter, a state of things which has sometimes occurred in our autumnal fevers.

Consequently, &c. From what has been said of the nature of hepatitis it is evident that vigorous antiphlogistic measures (the long accustomed means in all inflammatory diseases) will be among our most valuable resources. Of these the most important & indispensable is venesection. Blood abstracted at the commencement of the attack in a quantity sufficiently copious, will strikingly exhibit its effects in subduing the inflammatory diathesis and in diminishing pain.

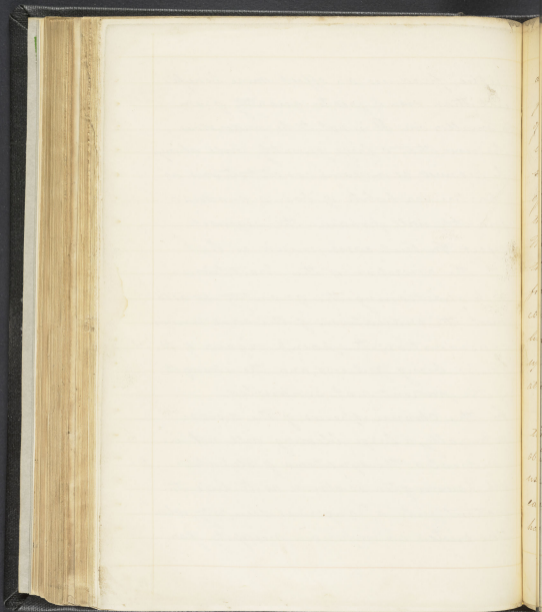


It is at this stage of the Disease that our remedies will be all important in arresting the inflammatory symptoms and preventing suppuration. If we should neglect the most copious depletion at this time, or feebly temporize with inefficient remedies, the favorable opportunity will be lost & we will have reason to fear for the ultimate fate of our patient. It has been emphatically said that in these diseases of a phlogistic nature we have no substitute for the lancet. We must therefore make use of it as the pain is acute & the pulse full strong & vigorous. And in case the phlogose symptoms are not greatly abated on its first application, a speedy repetition will be demanded. Men of experience have remarked that in all inflammatory complaints blood drawn from a large



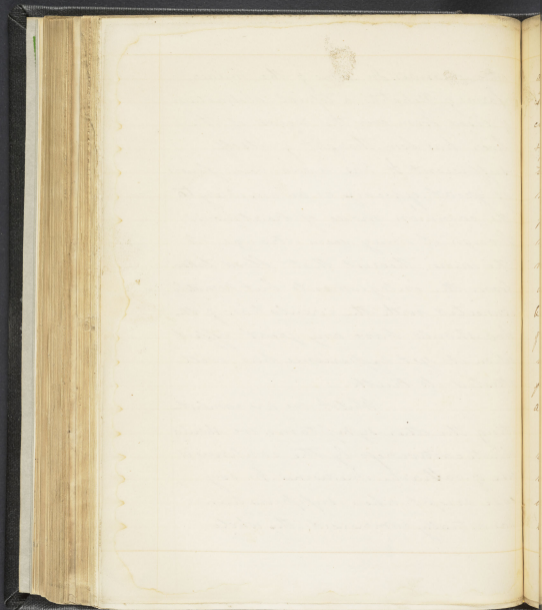
cupress, produces an effect more beneficial than even a greater quantity from a smaller one. It is not to be understood however that a large quantity will always be required, as in some constitutions or particular habits of body a moderate quantity will produce the requisite effect. In such cases much is left to the discretion of the practitioner, in proportioning the quantity so as to meet the indications of the case under consideration; the pain, & vigour of the pulse being reduced, and the strength of the patient not exhausted.

In the Chronic species of the disease especially, a large bleeding will not be indicated. The symptoms of Hepatitis are however often so obscure as to lull the patient into a dangerous security, when there existed an imperious necessity for



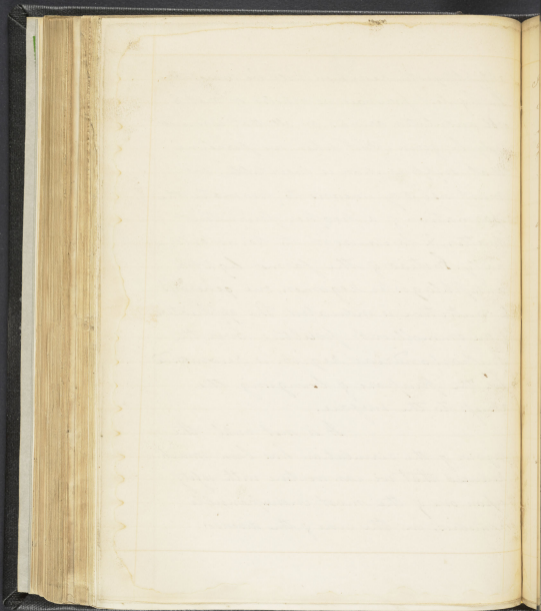
active measures. In some of the milder forms of Hepatitis, a topical abstraction of blood from over the region of the liver has been thought of itself sufficient. It has indeed been found of great efficacy as an auxiliary to the common mode of treatment. Though it may seem strange to the more theorist that blood taken from the integuments but remotely connected with the circulation of the liver should have any great effect upon it, yet experience has well attested its truth.

Whilst we are combating the other symptoms, we should obstruct castiveness by the continued use of cathartic medicines. In every case except where suppuration has actually commenced the whole



antiphlogistic regimen will be necessary. The lightest formiculous articles of diet & cold acidulated drinks are all that can with safety be given. But when we perceive that suppuration is inevitable, we must use every means to promote the formation of a proper purulent matter, & to cause it to point externally. Instead of the former light & antiphlogistic regimen, one generous & nutritive is indicated. The application of an emollient poultice over the hypochondriac region is recommended for the purpose of bringing the abscess to the surface.

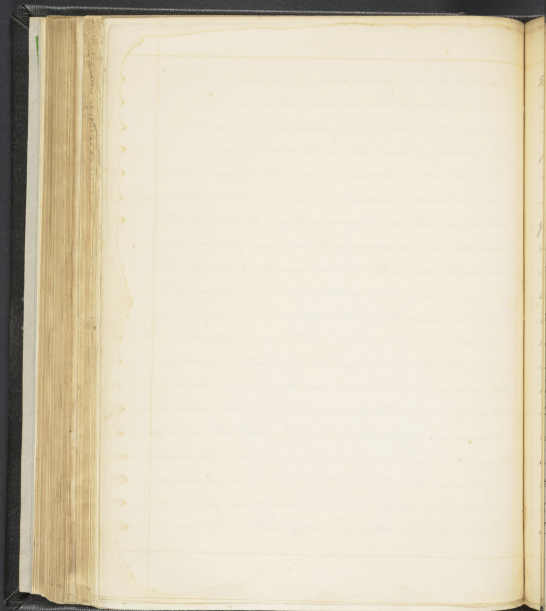
It is not until the vigour of the circulation has been much reduced that we can venture with safety upon one of the most indispensable remedies in the cure of the disease.



I allude to the application of Asters. The counter-irritation which they excite upon the surface, powerfully diverts Phlogosis from the internal organs.

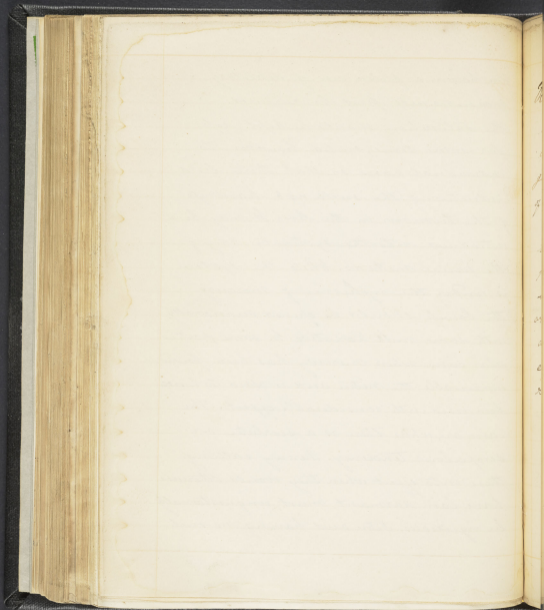
Various diaphoretics are employed to effect a determination to the skin. Among these nauseating doses of the emetic medicines stand conspicuous, as also do the Pediluvium & warm bath.

After the arterial excitement is reduced, the interrupted biliary secretion must be attended to. For the restoration of which the well known medicine is mercury. In nearly all the cases of hepatitis which occur in our climate it will be necessary. In warm climates where the disease appears not to attain such a degree of phlogose violence, Mercury is given almost in the onset of the attack;



Here however a fuller use of depuratory measures will first be required.

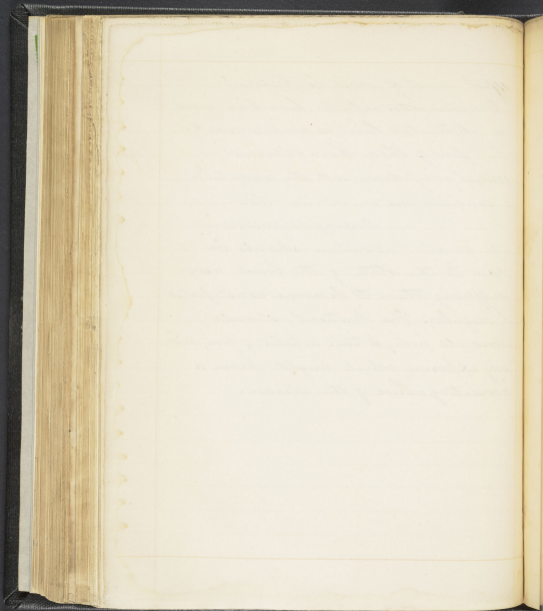
The salivation should be kept up for some time, guided however to individual cases so that there be a reduction of the swelling & hardness of the tumour in the liver. It may be introduced into the system in any of the usual methods. While the system is under the influence of mercury the bowels should be opened occasionally with some mild laxative. In some particular cases where mercury has been found inadvisable the nitric acid is said to have been used with considerable effect. The cases are, where there is a scarlatine or scrophulous tendency. Mercury calling these into effect when they would otherwise have lain dormant must unquestionably be vigorous. Nitric acid having no such



effect must of course be preferable.

Various other articles have been used in obstructed loeias, as ammoniac &c. but few of them have obtained a general confidence, with the exception of sandelion and one or two others.

During convalescence the greatest attention should be paid to the state of the bowels, never suffering them to become constipated or irregular. The patient should avoid all indigestible articles of food, and every exposure which might prove a receding cause of the disease.



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Dated March 6<sup>th</sup> 1828

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